

Hospice Care in Nursing Homes



**Fundamentals of Geriatrics
Advanced Geriatric
Seminar Series**

Susan C. Miller, Ph.D.

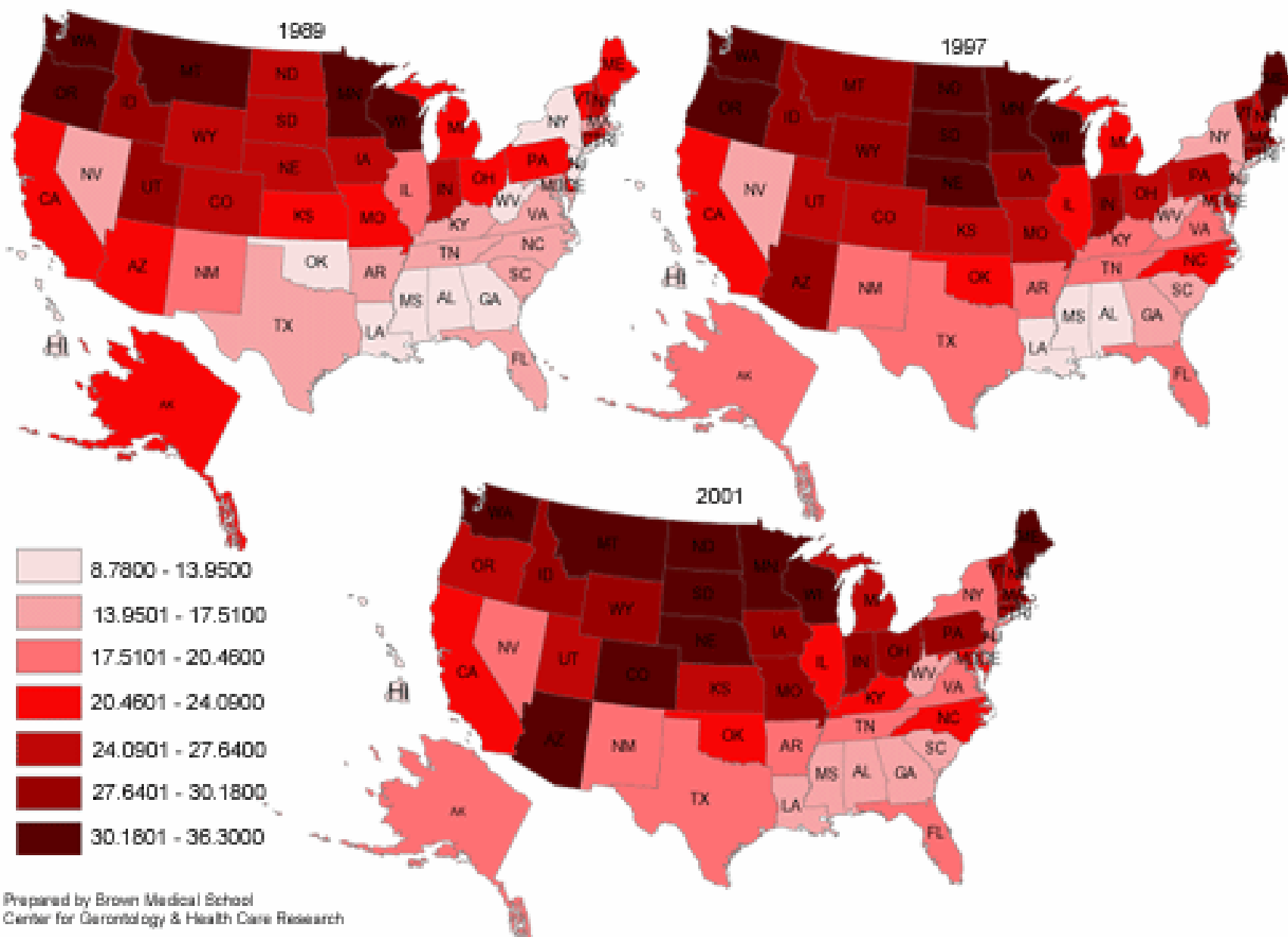


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Presentation Overview

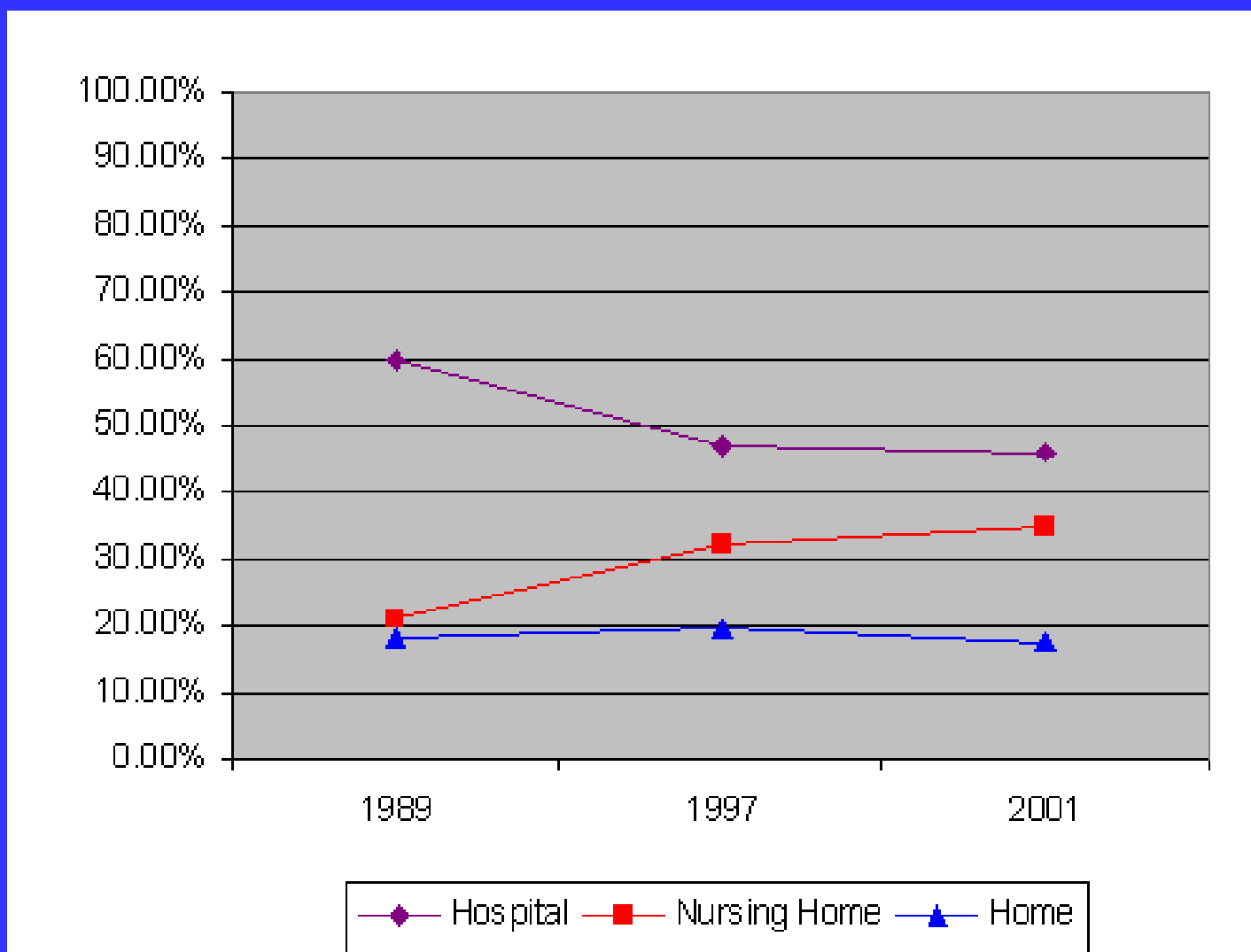
- What is the Medicare hospice benefit in nursing homes?
Why may it be needed?
- Access to hospice care—What are the challenges?
- Evidence of benefits of Medicare hospice care in nursing homes?
- What does hospice care in NHs cost the government?
- What next steps are needed to change policy / for improvement to occur?

Proportion of Deaths Occurring in a Nursing Home



Site of Death in Rhode Island – 1989 – 2001

From: <http://www.chcr.brown.edu/dying/factsondying.htm>





End-of-Life Care in Nursing Homes

- Many NHs provide compassionate, competent, and coordinated medical care. They are the final home...
- Yet, there are important opportunities to improve AS EVIDENT BY RECENT RESEARCH / OTHER RESEARCH.

AARP Policy Report (2004)

End-of-Life in Nursing Homes

by Wetle T, Teno J, Shield, R, Welch L, Miller SC.

Report shows . . . *that nursing facilities are often ill prepared to address adequately the needs of dying residents and their families.*

Excerpt from Report's Forward:

*We can experience the frustration of family members
.. But we can also catch their moments of pride in helping a dying relative through difficult times, and we witness their gratitude to staff who went out of their way to provide an extra level of care and support.*

Donald L. Redfoot, AARP

Nursing Home Barriers

- Reimbursement is problematic.
- NHs are being asked to provide sub-acute care, custodial care for persons with dementia / advanced frailty, and care for residents dying of chronic, progressive and acute illnesses.
 - Yet, in most NHs staff lack palliative care expertise and staffing is inadequate for comprehensive palliative care.
 - And, staff shortages exist and staff turnover is daunting.
 - Additionally, regulations reinforce task-focused rather than person-centered care.

AREAS OF RESEARCH INTEREST

CAN HOSPICE HELP?

IS HOSPICE USED, AND WHY OR WHY NOT?

IS HOSPICE MORE EXPENSIVE?

HOW CAN BARRIERS TO HOSPICE USE BE
OVERCOME?

WHAT NEW PROGRAMS OR BENEFITS ARE
NEEDED TO IMPROVE PALLIATIVE END-OF-LIFE
CARE IN NHs, ESPECIALLY WHEN HOSPICE
ISN'T AN OPTION?

Successful Collaborations...



...are partnerships where care planning, coordination and provision are performed in care environments where:

- mutual respect dominates;
- providers routinely share knowledge; and
- policies and procedures clarify the roles of each collaborating party.

Hospice Care In Nursing Homes

- Medicare levels of hospice care:
 - **Routine home care** (around \$100 a day)
 - **Continuous home care** (in periods of crisis—for at least 8 consecutive hours in one 24 hour period at least half by nurse) (around \$600 for 24 hours of care)
 - **General inpatient care** (in periods of crisis) (around \$500 a day)
 - **Respite inpatient care** (around \$100 a day)
- Routine home care is most used in nursing home (overall, 87% of hospice care provided)

Hospice Care in Nursing Homes

Reimbursement--

--Hospice receives Medicare hospice payment.

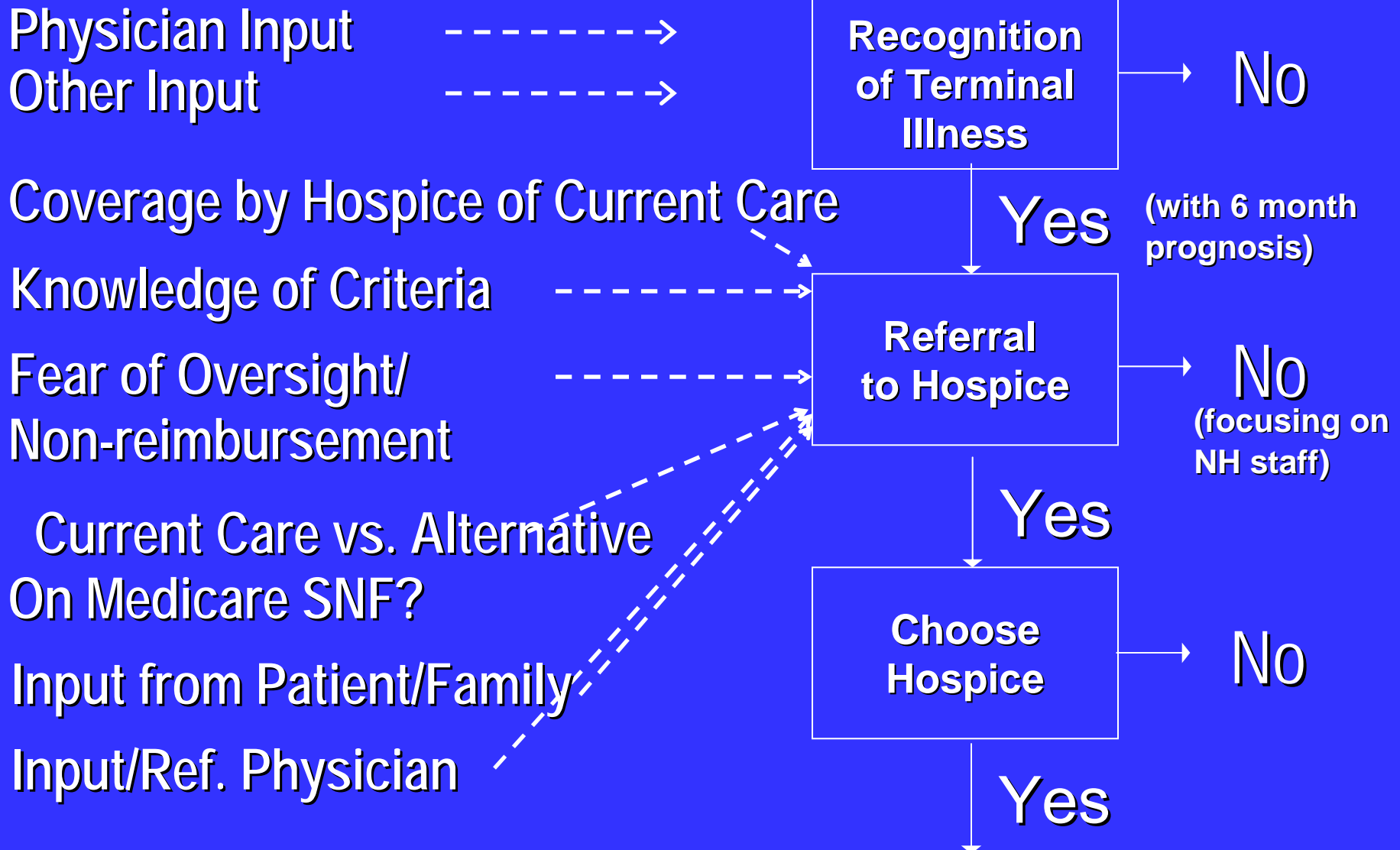
--Hospice receives 95% of Medicaid per diem and pays nursing home 95 to 100% of per diem.

Hospice Care In Nursing Homes

- Requirements for Medicare Hospice Care in Nursing Homes
 - Contract between hospice and nursing home
 - Medicare certified hospice provider
 - Coordinated care planning and evidence of this
 - According to regulations, hospice assumes care coordination

The Individual Hospice Referral – Nursing Home Residents

“The Referral”



The Proportion of Nursing Homes that Contract with Hospice

Nursing Homes with Any Residents on Hospice-- Kansas, Maine, Mississippi, New York and South Dakota

- 1993 23.3%
- 1996 56.6%
- 1997 51.3%

2000 77.3%--ALL STATES

Florida 96%; Wyoming 36%

2000 Rhode Island -- 68%

2003 Rhode Island -- 79%*

***Miller SC, Fyffe U. 2003 RI state survey; 72%response**



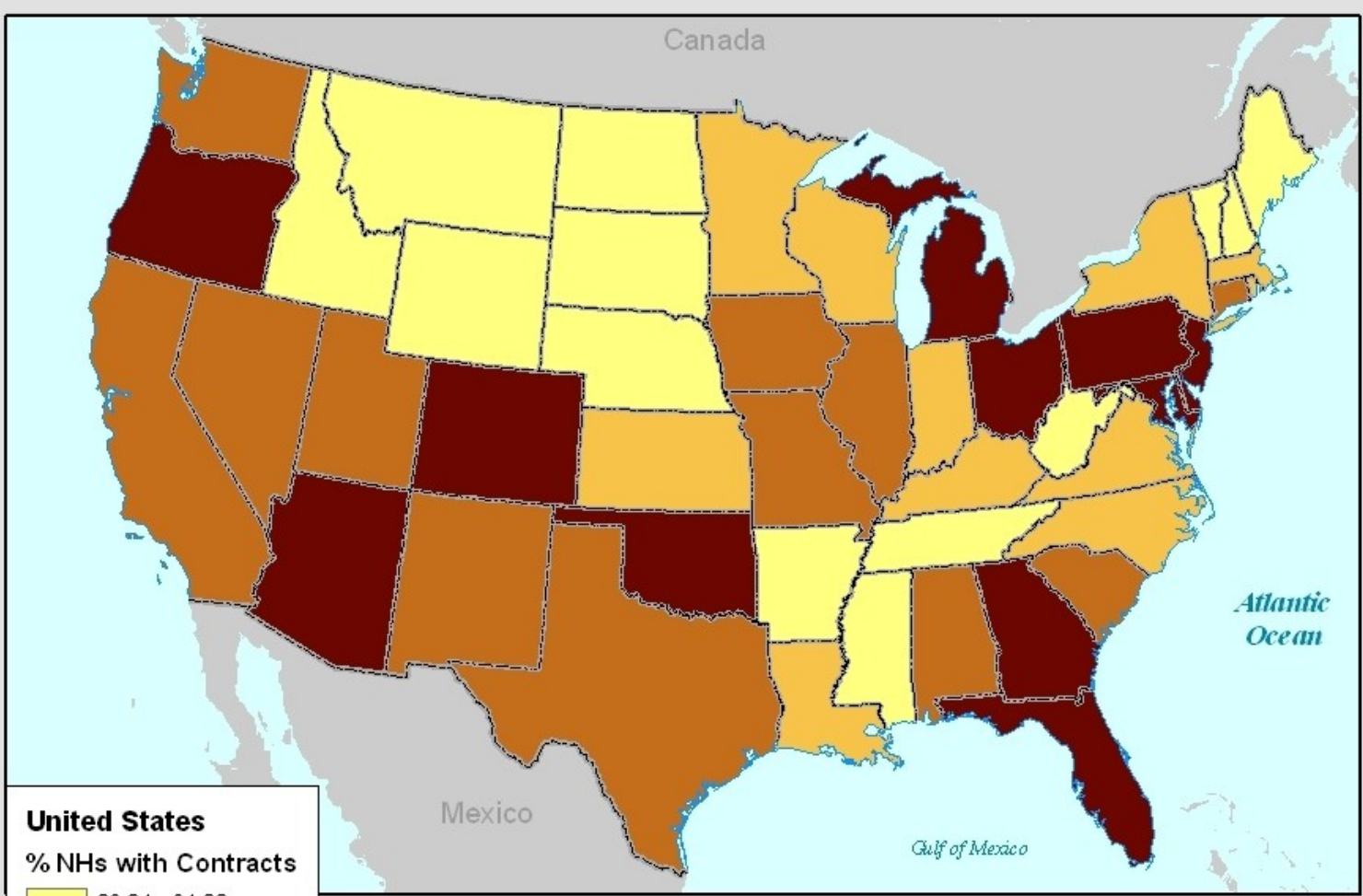
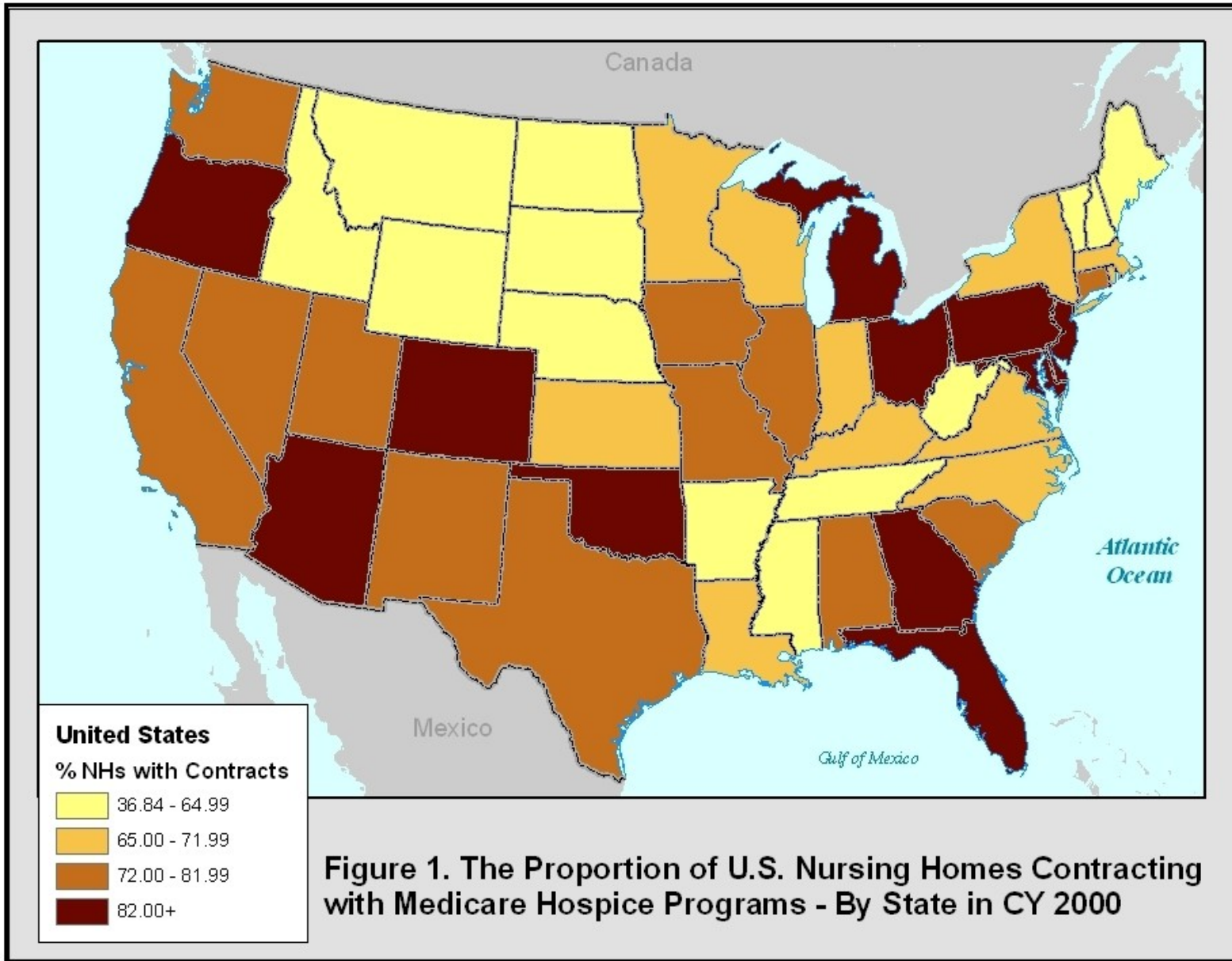


Figure 1. The Proportion of U.S. Nursing Homes Contracting with Medicare Hospice Programs - By State in CY 2000

Proportion of Dying NH Residents Who Access Hospice

- **6%** of residents who died in 5-state study (KS, ME, MS, NY, SD) in years **1992 – 1996**
- **8.5%** of residents who died in 5-state study (KS, ME, NY, OH, SD) in years **1995-1997** (*in submission, Gozalo & Miller*)
- **22%** of dual-eligible residents who died in **2nd half of 1999 in Florida nursing homes** (*in press, Miller SC et al., Journal of American Geriatrics Society*)

Proportion of Dying NH Residents Who Access Hospice

- **23% in U.S.--Preliminary Analysis—2000**
 - Not presently weighted by state.
 - Residents had NH care (i.e., MDS) in 2000 & died in 2000 and had hospice in last 6 months of life. (Some may have died in community so estimate presently is a little high.)
 - **Highest--38.5% in Arizona; 34% Florida; 32% Colorado; RHODE ISLAND = 15%**
 - **Lowest—5% in Maine & Vermont; 7% Wyoming**

What Is The Added Value of Hospice Care in Nursing Homes?



Synthesis and Analysis of the Medicare Hospice Benefit

(ASPE-funded study; Investigators: Susan C. Miller, Pedro Gozalo, & Vincent Mor)

Sample--

2,644 hospice nursing home decedents electing hospice in 1992 through 1996 and 7,929 non-hospice decedents--Total n=10,573

Data Source --

MDS+ assessment data in KS, ME, MS, NY, & SD merged with CMS enrollment and claims data -- Used last MDS -- 30 mean days from death

Acute Care Hospitalization (percent hospitalized) --Received Hospice Entire 30 or 90 Days

Time Prior
to Death

Hospice
Percent

Non-Hospice
Percent

30 days

2 %

39 %

90 days

3 %

50 %

Effect of Hospice Enrollment-- Hospitalization In Last 30 Days*

Outcome Measure
Hospitalization

Odds Ratio (95% CI)
0.30 (.25, .34)

* Controlling for gender, race, marital status, age, ADLs, CPS, selected diagnoses, advance directives, short NH stay, state, and non-independence of patients residing in the same NH.

Comparisons -- Pain Prevalence and Treatment

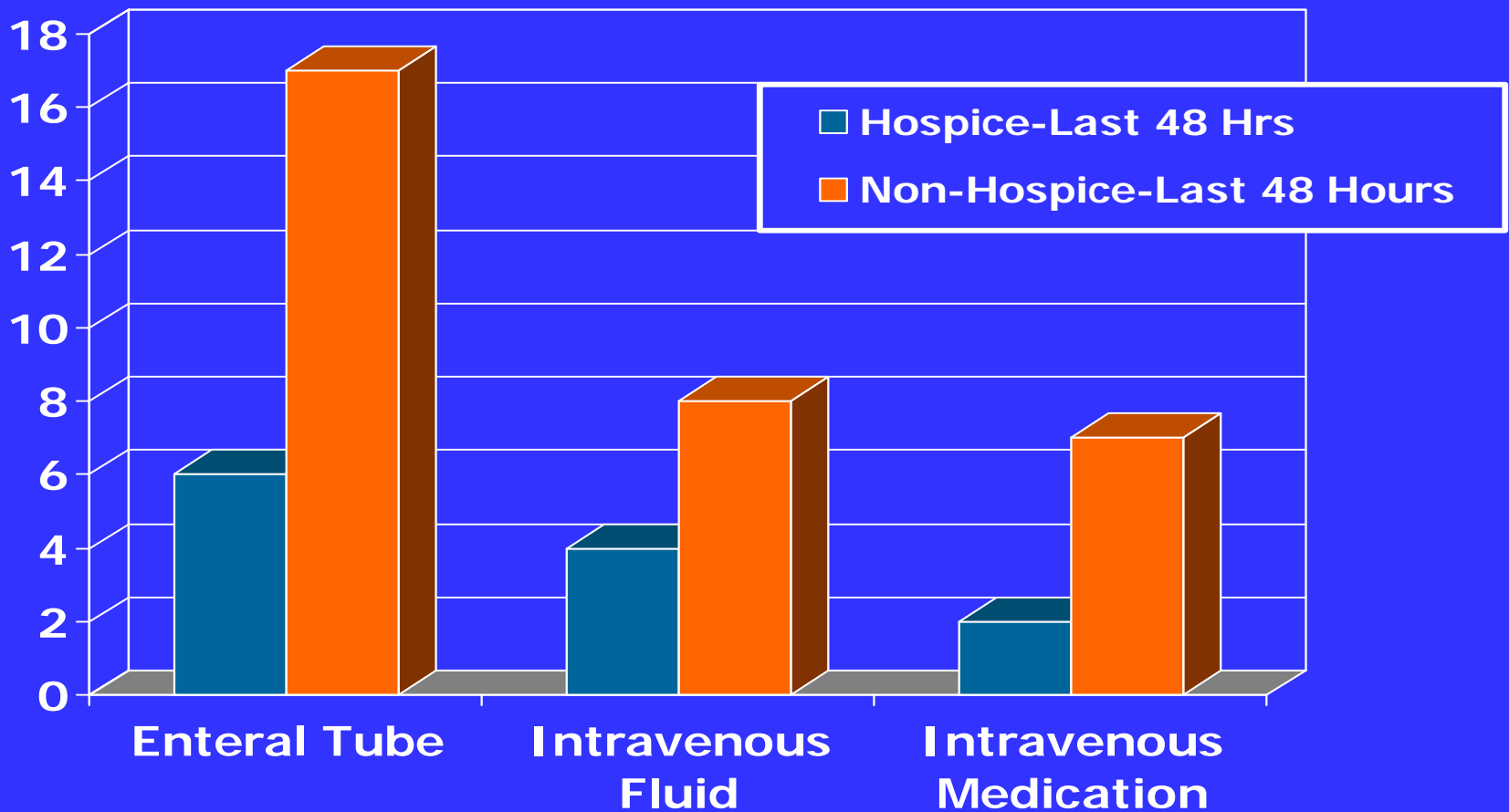
	<u>Hospice</u>	<u>Non-Hospice</u>
Daily pain on last MDS	30%	18%
Daily pain with analgesic administered twice a day	57%	39%

Hospice in Nursing Homes: An Empirical Examination of its Scope and Quality Outcomes

(Funded by RRF; Investigators: Susan C. Miller, Vincent Mor and Joan Teno)

- **Convenience sample of hospices and nursing homes in 6 geographic areas across the United States.**
 - 11 hospice programs and 28 nursing homes participated.
 - 209 hospice decedents and 172 non-hospice decedents dying in time period--8/1/97 -- 7/30/98--Total n = 381
- **Resident nursing home and hospice records for the 30 days prior to death, interviews with staff, interviews with next-of-kin**

Use of Treatments for Hospice versus Non-Hospice Residents (%)



Hospitalization at End of Life¹

	Hospice	Non-Hospice
Died in Hospital	2%	17%
Hospitalized in Last 30 Days of Life ²	12%	37%

¹Includes acute care hospitalization and inpatient hospice.

²Excludes hospice patients hospitalized only prior to hospice admission

Pharmacological Management of Assessed Pain

(Miller SC, Mor V, Teno J. 2003. *Journal of Pain & Symptom Management*)

Hospice

	<=7Days (N=32)	>7Days (N=115)	No Hospice (N=118)
Any opioid--last 48 hours	75%	90%	69%
Any opioid given twice a day -- last 48 hrs. of life	50%	79%	60%

What is the “Cost” of Hospice
Care to Medicare & Medicaid?

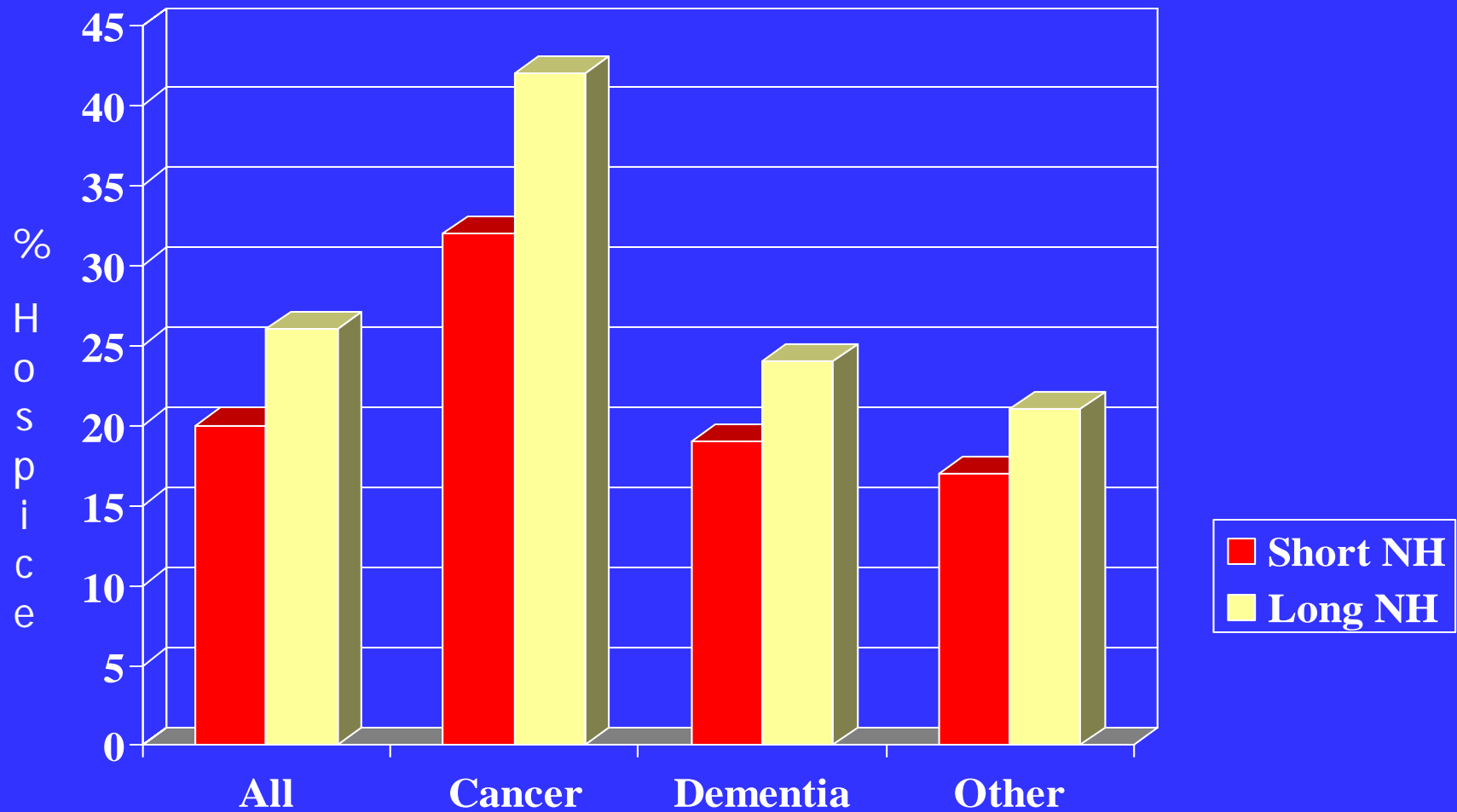
End-of-Life Expenditures in Nursing Homes

Susan C. Miller, Ph.D., Pedro Gozalo, Ph.D., Orna Intrator, Ph.D., Jason Roy, Ph.D., Vincent Mor, Ph.D.

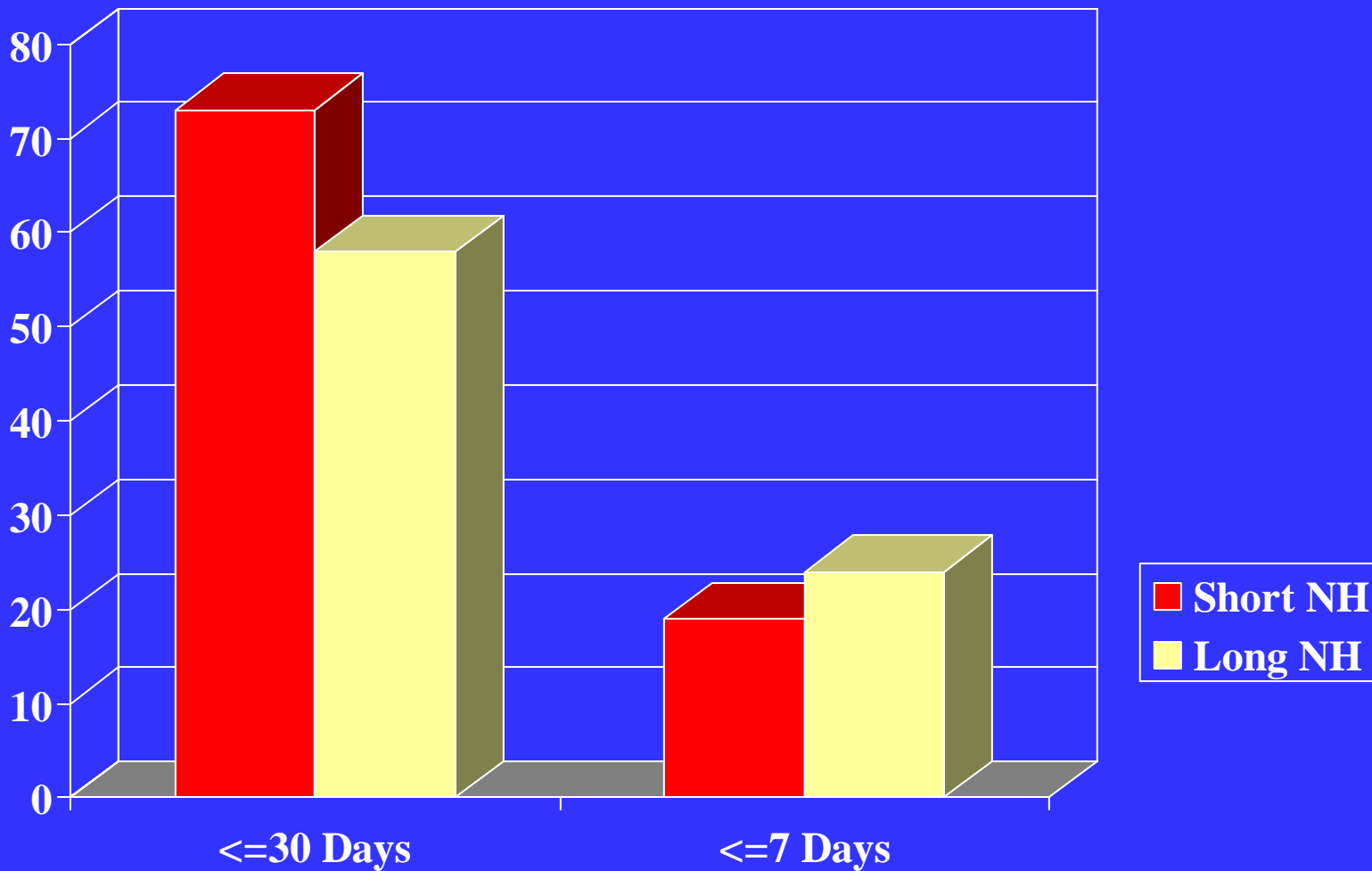
- Dually-Eligible NH residents who died in Florida Nursing Homes in the last 6 months of FY 1999 and who had a resident assessment (MDS)
- Final Analytic Sample = 5,559 (3.7% excluded because of missing data)
- Three diagnosis groups: Cancer, AD/dementia, Other

* Funded by: the Agency for Healthcare Research and Quality

Proportion of Short and Long NH Stays with Hospice



Sample—Proportion of Hospice Residents with Hospice Stays ≤ 7 days and ≤ 30 days



Mean Medicare Expenditures in Last Month of Life by
 Type of Expenditure *(Miller SC, Intrator O, Gozalo P, Roy J, Barber J, Mor V. Journal of American Geriatrics Society, in press.)*

Expenditure Category	Short-stay		Long-stay	
	Hospice (N=110)	NonHspc (N=549)	Hospice (N=414)	NonHspc (N=1550)
Acute Inpatient	2,388	7,791	1,066	3,277
Nursing Home	1,811	2,674	95	256
Hospice	1,940	0	2,817	0
All Other	143	224	71	123
Total	6,282*	10,689*	4,049	3,656
Medicaid & Medicare	8,370*	12,416*	6,917	6,447

*p<.001

Results: Long Stay with Dx="Other" Coefficient Estimates

N=1962

Standard GLS

Fixed-Effects

IPT Weights for Hospice Selection

	Estimate (95% CI)	Estimate (95% CI)	Estimate (95% CI)
Intercept	78.8 (72.2, 85.4)***	84.2 (78.7, 89.6)***	72.2 (65.4, 78.9)***
Hospice	7.8 (5.0, 10.6)***	7.2 (3.3, 11.1)***	5.9(2.9, 8.9)***
Age85+	-7.9 (-13.5, -2.3)**	-8.7 (-13.8, -3.6)***	-6.1 (-12.0, -0.2)*
Male	2.0 (-1.5, 5.4)	1.5 (-1.9, 5.0)	-0.6 (-4.3, 3.1)
Cognitively Impaired (severe)	-6.4 (-9.8, -3.0)***	-7.2 (-11.0, -3.5)***	-3.3 (-7.1, -0.6)
Black Race	11.0 (6.4, 15.7)***	9.1 (3.8,14.5)***	7.9 (1.5, 14.2)**
Other Race (Non-white, non-black)	20.3 (15.1,25.5)***	5.7 (-1.9, 13.3)	18.3 (10.7, 25.8)***

* $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

Long Stay with Dx="Other" Multivariate Average Daily Total Expenditures

	Non-Weighted Estimate (95% CI)	With Stabilized Weights for Hospice Selection Estimate (95% CI)	With Stabilized Weights for Hospice Selection and Mortality Estimate (95% CI)
Intercept	4.4 (2.5, 6.3)***	4.6 (2.6, 6.6)***	5.2 (3.3, 7.1)***
Additional Week of Life	0.0 (0.0, 0.0)***	0.0 (0.0, 0.0)***	0.0 (0.0, 0.0)***
Medicaid Week	7.5 (5.6, 9.3)***	7.3 (5.4, 9.2)***	7.2 (5.4, 9.0)***
Only Hospice Inpatient	14.7 (11.6, 17.8)***	14.9 (11.6, 18.1)***	11.4 (8.2, 14.5)***
1 st Hospice Week	-1.5 (-2.5, -0.6)**	-1.7 (-2.9, -0.4)*	-0.8 (-2.6, 1.1)
2 nd Hospice Week	0.4 (-0.4, 1.3)	0.6 (-0.8, 2.0)	1.2 (-0.8, 3.3)
3 rd Hospice Week	0.5 (-0.4, 1.4)	1.1 (-0.6, 2.7)	1.8 (-0.6, 4.1)
Each Subsequent Hospice Week	0.1 (-0.1, 0.2)	0.1 (-0.1, 0.4)	0.2 (0.0, 0.4)*

* p ≤ .05

** p ≤ .01

*** p ≤ .001

Hospice Savings/Costs for Subgroups (Long Stay)

			β Estimates		Additional Cost from being in Hospice	
			Standard Model	Selection Adj.Model	Standard Model	Selection Adj.Model
Male	Age 85+	Cognitively Impaired				
0	0	0	-2.9	-5.5	-471	-854
0	0	1	10.0	10.3	1,707	1,761
0	1	0	1.5	-1.5	243	-239
0	1	1	14.5	14.3	2,540	2,502
1	0	0	-9.0	-13.4	-1,362	-1,974
1	0	1	4.0	2.4	662	391
1	1	0	-4.5	-9.4	-703	-1,422
1	1	1	8.5	6.4	1,438	1,069

Being "Cognitively Impaired" has the biggest extra cost from hospice among long stay residents

Retrospective Analysis

Results: Short Stay with Dx="Other" Coefficient

Estimates *(Gozalo P, Miller SC, Intrator O, Roy J, Mor V. In preparation.)*

N=659	Standard GLS	Fixed-Effects	IPT Weights for Hospice Selection
	Estimate (95% CI)	Estimate (95% CI)	Estimate (95% CI)
Intercept	93.0 (68.9, 117.2)***	92.0 (80.8, 103)***	76.6 (60.9, 98.4)***
Hospice	-13.8 (-19.4, -8.2)***	-11.8 (-23.7, 0.1)	-17.8 (-22.9, -12.6)***
Age85+	-0.97 (-6.1, 4.2)	-1.6 (-9.7, 6.6)	4.9 (-0.8, 10.6)
Cognitively Impaired (severe)	-1.5 (-7.5, 4.4)	-5.7 (-15.4, 3.9)	-0.4 (-5.8, 5.0)
Black Race	15.9 (8.5, 23.3)***	18.1 (4.8, 31.5)**	12.2 (5.2, 19.2)***
Other Race (Non-white, non-black)	18.3 (8.9, 27.7)***	3.7 (-12.6, 20.1)	14.2 (5.9, 22.5)***

* p ≤ .05 ** p ≤ .01 *** p ≤ .001

Prospective Analysis

Short Stay with Dx="Other" Multivariate Average Daily Total Expenditures

	Non-Weighted Estimate (95% CI)	With Stabilized Weights for Hospice Selection Estimate (95% CI)	With Stabilized Weights for Hospice Selection and Mortality Estimate (95% CI)
Intercept	4.9 (3.1, 6.7)***	16.1 (10.9, 21.3)***	33.1 (26.2, 40.0)***
Additional Week of Life	-0.1 (-0.1, -0.1)***	-0.8 (-1.0, -0.6)***	-0.8 (-1.0, -0.6)***
Medicaid Week	6.8 (5.5, 8.1)***	6.0 (3.8, 8.1)***	-9.2 (-10.8, -7.6)***
Only Hospice Inpatient	12.3 (10.5, 14.1)***	11.4 (5.8, 17.0)***	14.6 (9.1, 20.1)***
1 st Hospice Week	-0.4 (-1.4, 0.6)	-5.0 (-8.4, -1.6)**	-7.0 (-10.7, -3.2)***
2 nd Hospice Week	0.4 (-0.6, 1.4)	-2.1 (-3.4, -0.7)**	-0.0 (-4.0, 4.0)
3 rd Hospice Week	0.9 (-0.0, 1.9)	-1.6 (-2.4, -0.7)***	-1.8 (-2.8, -0.9)***
Each Subsequent Hospice Week	0.2 (0.1, 0.3)***	0.3 (-0.0, 0.7)	0.1 (-0.2, 0.4)

* $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$
Adjusted to other resident and facility factors

Hospice Savings/Costs for Subgroups (Short Stay)

			β Estimates		Additional Cost from being in Hospice	
Race Other	Age 85+	Cognitively Impaired	Standard Model	Selection Adj.Model	Standard Model	Selection Adj.Model
0	0	0	-24.2	-29.2	-4,816	-5,665
0	0	1	-15.8	-20.0	-3,277	-4,064
0	1	0	-8.1	-10.8	-1,742	-2,294
0	1	1	0.3	-1.7	67	-377
1	0	0	-38.2	-41.9	-7,067	-7,597
1	0	1	-29.8	-32.7	-5,763	-6,229
1	1	0	-22.1	-23.5	-4,444	-4,693
1	1	1	-13.7	-14.3	-2,870	-2,987

The "Age < 85" group has the biggest savings from hospice among short stay residents

Medicare Part-A SNF Care Short NH Stays & Hospice Enrollment

- ~30% of NH residents are on the Medicare SNF benefit when they die.
- 64% of short-stay (≤ 90 NH days) NH residents had SNF care in last 90 days of life & only 27% of long-stay (> 90 days) residents had this care.
- 19% of residents with SNF care in last 90 days of life accessed hospice while 31% with no SNF care accessed hospice.

Mean Daily Medicare Expenditures for SNF Residents by Subsequent Hospice Status: Florida Nursing Home Decedents in July – December, 1999

Time Period— Prior to Death ALL	Medicare SNF in Identified Period AND			
	No Hospice Mean±Std	Any NH Hospice* Mean±Std	Home Hospice** Mean±Std	Inpatient Hospice ONLY*** Mean±Std
Last Month of Life	\$428±340 (N=1872)	\$253±138 (N=184)	\$360±214 (N=82)	\$512±216 (N=112)
15 – 30 Days	\$355±261 (N=1589)	\$250±138 (N=36)	\$261±161 (N=11)	\$363±128 (N=7)
8 – 14 Days	\$350±258 (N=1438)	\$178±77 (N=23)	\$189±54 (N=11)	\$676±384 (N=8)
3 – 7 Days	\$366±322 (N=1327)	\$213±155 (N=29)	\$245±208 (N=11)	\$576±390 (N=10)
0 – 2 Days	\$602±1206 (N=1144)	\$256±56 (N=14)	\$296±172 (N=5)	\$810±879 (N=7)

* Residents received any hospice in the nursing home. ** Residents received hospice outside of the nursing home in a home in the community.

*** In most cases hospitalization is followed by inpatient hospice, then death.

Timely Access to Hospice Care – Understanding Barriers and Influencing Change*

- 1) Mail survey of RI NH administrators
- 2) Qualitative Interviews:
 - 7 RI nursing home & 2 RI hospices
 - 91 qualitative interviews of NH and hospice staff regarding 32 NH residents who died

Collaborators: Edward Martin, M.D., Aman Nanda, M.D., Lisa Welch, Ph.D., Sharon Bayha, RN (Nicole Palin, BS—project support staff)

*Funded by Project on Death in America, Open Society Institute; Susan C. Miller, PI.

BUT . . . Some Nursing Homes Choose Not to Contract with Hospice--

- Theory of Administrator as Gatekeeper
 - Don't view hospice as favorably as NHs that do contract with hospice.
 - Previous experience with hospice
 - Don't see added value—staff providing good palliative care, don't see hospice as helping them as needed, other
 - Because of Financial Impact on NH
 - Cost of implementation & interorganizational collaboration

View of Hospice in Nursing Home by RI Nursing Home Administrators (Miller SC, Fyffe, U. 2004, in preparation) (N=64; 69% of 93 NHs)

	VERY	SOME- WHAT	SOMEWHAT NOT	NOT
Overall, how beneficial to:				
Patient / Family?	59%	34%	3%	0%
NH Staff?	47%	41%	5%	0%
Nursing Home?	45%	39%	3%	3%
– NH's financial status?	27%	25%	25%	13%

View of Hospice in Nursing Home by RI Nursing Home Administrators (Miller SC, Fyffe, U. 2004, in preparation) (N=64; 69% of 93 NHs)

- If you care to respond, can you tell us what you think would need to be different to make hospice **MORE** beneficial to NH residents who enroll in hospice **AND/OR** your nursing home? (N=33 who responded to question)
 - **9 of 33 (27%)**--Better reimbursement—Medicaid payment late, less than 100%; System doesn't promote utilization.
 - **5 of 33 (15%)**--Delivery of promised service is lacking (e.g., timing of services, other)

Director of Nursing As Gatekeeper to Referral -- RI Nursing Home Study Six DON Interviews--Preliminary Analysis

- Appeared to be no policies or procedures in place for assessing terminal status and/or hospice eligibility—2 NHs appeared to have more structure.
- NH nurses and social workers initiate discussion of hospice

Director of Nursing As Gatekeeper to Referral -- RI Nursing Home Study Six DON Interviews--Preliminary Analysis

- Two DON's talked of frustration re: unavailability of physicians & reluctance to discuss prognosis
- Discussed “stigmatism” association with “hospice”—
 - Physicians view as “*sign of failure*” & Families “*get frightened when (they) hear the word hospice and because (of this) it takes a bit of working with them.*”
- All generally positive regarding benefits of hospice but, 3 of 6 DONs appeared to be “true believers”

DON Interview Comments Relating to Hospice Referral & SNF

“... If the patient is alert and oriented and able to make that decision, obviously we'd discuss it with them. . . . Sometime(s) it's a friend designated we talk to with power of attorney for health care. But what we have to be careful of is we have to downgrade someone from skilled and the reg for that is a 72 hour notice.”

Facilitators and Impediments to Hospice Referral-- RI Nursing Home Study Preliminary Analysis

- Facilitators:
 - Cancer diagnosis, pain
 - Death expected, resident decline
 - NH staff brought up hospice
- Impediments:
 - Something “bad” has to present—Examples of statements made regarding no need for hospice:
 - “resident’s pain managed”
 - “no family present”
 - “resident comfortable”

Facilitators & Impediments to Earlier Hospice Referral -- RI Nursing Home Study

Preliminary Analysis

- Facilitators:
 - NH staff discussions with residents / families
 - Physicians proactive
 - Cancer diagnosis
 - Utilization indicators of decline
 - Hospitalization, blood transfusions, other
- Impediments
 - Family disagreement / delays in locating
 - Non-cancer diagnosis
 - ???—Gaps between probable death identified & referral still undergoing study

One Hospice RN's Interview Comments Relating to Hospice Referral & SNF

Question: “. . . were there any disagreements to your knowledge regarding the hospice referral or its timing?”

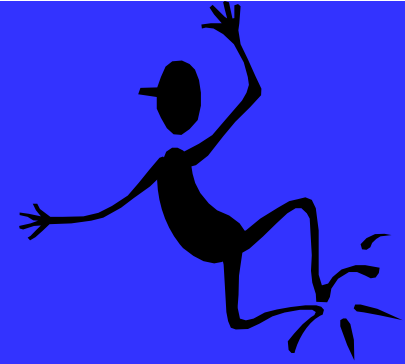
Response: “No, well other than she was skilled and then you know we can't go into the nursing home if the patient is skilled. So they downgraded her. The referral was made on the 1st . . . They downgraded her on the 2nd . . . and the requested visit date was the 4th.”

Next Steps



- Research
 - Proposal for further study using data across U.S. states
 - Develop feasible benefit model
 - Demonstration project
 - The Collaboration -- RWJ Project
- Improving Care
 - Begin to develop a plan to address issues raised by study.
 - Disseminate findings / educational conference / other
 - Ongoing BCBS study in Rhode Island
 - Other

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